Claims

1. An antibody, capable to selectively bind to the three dimensional conformation provided by the C-terminal part of the PrP^{Sc} isoform of the prion protein or a part thereof, while not binding to the PrP^{C} form.

2. The antibody according to claim 1, wherein the C-terminal part comprises a region of the prion polypeptide ranging from about amino acid no. 190 to amino acid no. 214, preferably from no. 202 to 214 of the prion polypeptide, or variants thereof, obtained by substituting or omitting or adding one or more amino acids without changing the three dimensional conformation thereof.

3. The antibody according to claim 1 or claim 2, wherein the protein sequence recognized by the antibody is

-Cys-Ile-Thr-Gln-Tyr-Glu-Arg-Glu-Ser-Gln-Ala-Tyr-Tyr-

or a part thereof.

4. The antibody according to any of the preceding claims, which is a polyclonal or a monoclonal antibody or a fragment thereof.

5. The antibody according to any of the preceding claims, which is linked to a marker.

6. The antibody according to any of the claims 1 or 2, which is derived from the hybridoma cell line CNCM I-2476.

7. Use of an antibody according to any of the claims 1 to 6 or a functional part thereof for the diagnosis and/or treatment of Bovine Spongiform Encephalopathy or Creutz-

feld-Jacobs-Disease or a variant form of Creutzfeld-Jacobs-Disease or TSE related diseases.

8. The use of an antibody according to any of the claims 1 to 6 for the production of a drug against BSE and/or CJD and/or vCJD or TSE related diseases.

9. The use of an antibody according to any of the claims 1 to 6 for the production of an active and/or passive vaccine against BSE, CJD, vCJD or TSE related diseases.

10. A method of producing an antibody according to any of the claims 1 to 6 comprising the step of immunizing an animal with an amount of a peptide having the amino acid sequence

-Cys-Ile-Thr-Gln-Tyr-Glu-Arg-Glu-Ser-Gln-Ala-Tyr-Tyr-

or

-Cys-Ile-Thr-Gln-Tyr-Gln-Arg-Glu-Ser-Gln-Ala-Tyr-Tyr-

or a variant thereof, obtained by substituting, deleting or adding one or more amino acids with the proviso that the three dimensional conformation is essentially retained, sufficient to elicit an immune response.

11. Kit for the diagnosis and/or the treatment of BSE and/or CJD and/or vCJD or TSE related diseases, containing an antibody according to any of the claims 1 to 6.

12. Pharmaceutical composition, comprising an antibody according to any of the claims 1 to 6.

13. Hybridoma cell line capable to produce an antibody according to any of the claims 1 to 6.

~~14. Hybridoma cell line according to claim 13, which is CNCM I-2476.~~

~~15. Antibody directed to the idiotype of an antibody according to any~~ of the claims 1 to 6.

16. Use of an antibody according to claim 15 for the manufacture of a drug or an vaccine.

17. A peptide having the amino acid sequence

Cys-Ile-Thr-Gln-Tyr-Glu-Arg-Glu-Ser-Gln-Ala-Tyr-Tyr

or a sequence derived therefrom by substituting one or more amino acids with the proviso that the three conformational characteristic of said peptide is essentially maintained.

18. A peptide according to claim 17, wherein the peptide is

Cys-Ile-Thr-Gln-Tyr-Gln-Arg-Glu-Ser-Gln-Ala-Tyr-Tyr

19. Use of an amino acid sequence according to claim 17 or claim 18 for the preparation of a drug or vaccine against BSE, CJD, vCJD or TSE related diseases.